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Relación entre asertividad, rendimiento académico y ansiedad en una muestra de estudiantes mexicanos de secundaria

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Resumen

Las habilidades sociales, en su forma más avanzada, están dirigidas a resolver problemas inmediatos de la situación, a la vez que minimizan la probabilidad de futuros problemas. Específicamente, la habilidad reconocida como *asertividad* puede guardar una relación con el rendimiento académico y el nivel de ansiedad en adolescentes. Teniendo esto en cuenta, el objetivo de la presente investigación es conocer la relación entre el nivel de asertividad, el rendimiento académico y diversos componentes de la ansiedad en una muestra de estudiantes mexicanos de secundaria, así como explorar posibles diferencias por sexo. Para esto, se hace un análisis descriptivo y correlacional, donde se utilizan dos instrumentos: la *Escala de Conducta Asertiva para Niños* y la *Escala de Ansiedad Manifiesta en Niños (revisada)*; además del promedio de calificaciones como indicador del rendimiento académico. Se utilizó una muestra de 535 adolescentes (54.6 % mujeres y 45.4 % hombres), con un promedio de edad de 13.01 años (DE = .74, rango de 11 a 17 años). Se realizó un muestreo por conglomerados y conveniencia, donde se abarcó la totalidad de los alumnos de los dos primeros grados escolares de una escuela pública del Estado de Hidalgo. Los resultados indican diferencias por sexo en todas las variables de estudio y correlaciones estadísticamente significativas entre asertividad y ansiedad (r = .182, p < .01), entre rendimiento académico y asertividad (r = .203, p < .01), y entre el rendimiento académico y el componente *preocupaciones sociales* de la escala de ansiedad (r = .124, p < .01), aunque estas últimas fueron de baja magnitud.

Palabras clave: Habilidades sociales, asertividad, rendimiento académico, ansiedad, estudiantes de secundaria.

Relationship between Assertiveness, Academic Performance and Anxiety in a Sample of Mexican Students in Secondary Education

Abstract

Social skills in their most advanced form are aimed at solving any immediate problems of a situation while minimizing the likelihood of future problems. This is also known as *assertiveness*, a variable that can be related to academic performance and the level of anxiety in adolescents. This research is descriptive and correlational with the aim of knowing the relationship between level of assertiveness, academic performance and various components of anxiety in a sample of Mexican high school or secondary students, as well as exploring possible differences related to sex. This study uses two instruments: *Children's Assertive Behavior Scale (CABS)* and the *Revised Children's Manifest Anxiety Scale*. The grade point average (GPA) was taken as an indicator of academic performance. The participants were 535 adolescents (54.6 % female, 45.4 % male), with a mean age of 13.01 years (std=.74, range 11 to 17 years). Cluster sampling and convenience sampling were used, encompassing all students in the first two grades of a public or state school in the state of Hidalgo. The results indicate sex differences in all study variables. We also found statistically significant correlations between assertiveness and anxiety (r=.182, p<.01), between academic performance and assertiveness (r=-.203, p<.01), although these were low in magnitude. *Key words*: Social skills, assertiveness, academic performance, anxiety, high school students

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Relação entre Assertividade, Desempenho Acadêmico e Ansiedade numa Amostra de Estudantes Mexicanos de Secundária

Resumo

As habilidades sociais, em sua forma mais avançada, estão voltadas a resolver problemas imediatos da situação enquanto diminuem a probabilidade de futuros problemas. Isso também é conhecido pelo termo *assertividade*, variável que pode estabelecer relação com o desempenho acadêmico e com o nível de ansiedade em adolescentes. Esta pesquisa foi descritiva e correlacional, teve como objetivo conhecer a relação entre o nível de assertividade, o desempenho acadêmico e diversos componentes da ansiedade numa amostra de estudantes mexicanos de secundária (equivalente ao ensino médio no Brasil), bem como explorar possíveis diferenças por sexo. Utilizaram-se dois instrumentos: *Escala de Comportamento Assertivo para Crianças* e *Escala de Ansiedade Manifestada em Crianças* (*revisada*); a média de qualificações foi tomada como indicador de desempenho acadêmico. A amostra foi composta por 535 adolescentes (54.6 % mulheres, 45.4 % homens), com uma média de idade de 13.01 anos (DP = .74, na faixa dos 11 aos 17 anos). A amostra foi por conglomerados e conveniência, abrangendo a totalidade dos estudantes dos primeiros anos escolares de uma escola pública do estado de Hidalgo. Os resultados indicam diferenças por sexo em todas as variáveis de estudo. Também se encontraram correlações estatisticamente significativas: entre assertividade e ansiedade (r=.182, p<.01), entre desempenho acadêmico e assertividade (r=.203, p<.01), e entre o desempenho acadêmico e o componente *preocupações sociais* da escala de ansiedade (r=.124, p<.01), embora estas tenham sido de baixa magnitude.

Palavras-chave: Ansiedade, assertividade, desempenho acadêmico, estudantes de secundária, habilidades sociais.

INTRODUCTION

From cognitive behavioral psychology, the term social competence involves three components: socio-emotional, which includes aspects such as attachment, expressiveness and self-control; sociocognitive, which encompasses social knowledge, adopting an approach, attributions and moral reasoning; and social behavior, which includes verbal and non-verbal communication skills, cooperation, support, participation and conflict management. Thus, social competence implies skills and knowledge necessary to successfully operate in different social interactions (Caballo, 1993).

Regarding social skills, Ribes, Bisquerra, Agulló, Fililla, & Soldevila (2005) define these as the ability to establish satisfactory social relations, which implies recognizing the emotions of others and helping other people to feel good, developing empathy, being assertive and resolving conflicts.

Social-learning theory initiated by Bandura (1982) serves as a basis for explaining behavior development. From this framework, social skills are usually acquired as a consequence of several mechanisms: direct experience, vicarious experiences or observational learning, verbal or non-verbal instructional transmission, feedback or interpersonal exchange. These forms of learning operate for the development of cognitive abilities and expectations regarding interpersonal situations, thanks to the reciprocal action between sources of influence generated by the individual himself and individuals of external origin.

The process of learning social skills starts with the first interactions between a mother and her baby, during which children learn social functions of smiles, gestures and words. With the development of more advanced forms of communication, the child can be incorporated into increasingly wider family and social groups. Thus, social skills are learned as they become more complex throughout life, because these skills need to adjust to the requirements that each individual faces, in each age of psychological development and in each context in which they perform.

Bermudez (2010) notes that such skills permit adaptation and proper functioning in the social environment, since they imply an unfolding of social, emotional and intellectual behaviors that are necessary to have an adequate adjustment to society. In the development of social competence there is the intervention of different behavioral (linguistic, motor, attention) abilities which interact in close interrelation with variables related to individual characteristics (cognitive, affective and physiological) as well as environmental, educational and cultural aspects which include values or social norms acquired at home, school and in other social contexts incorporated into by the individual throughout his life (García, Cabanillas, Morán, & Olaz, 2014).

Monjas (2012) clarifies that in childhood, social skills include all those behaviors necessary to interact and socialize with peers and adults in an effective and mutually satisfactory way. Appropriate relationships begin with the display of basic social interaction skills, such as smiling, greeting, doing favors, showing courtesy and kindness. The

establishment of such interactions is often a great source of reinforcement for children, providing them with the opportunity to develop more complex social behaviors, such as initiating conversations, formulating and answering questions, expressing affection and positive feelings, among others. This, in turn, can provide children with greater social reinforcement, which generates personal and interpersonal satisfaction in the short and long term (García et al., 2014).

Caballo (2009) defines socially skillful behavior as the set of behaviors emitted by an individual in an interpersonal context, which includes appropriate ways of expressing feelings, attitudes, desires, opinions or rights of a person, in a way that is appropriate to the situation, while respecting these behaviors in others. Social skills, in their most advanced form, are aimed at resolving immediate problems of the situation while minimizing the likelihood of future problems. This is also known as assertiveness, which is why it is considered as the way to encompass social behavior in school-age children, as well as in adolescents and adults.

The adequate expression and socialization of emotions enables individuals to develop empathy and to respond to the emotions of others (Cohen, Esterkind, Lacunza, Caballero, & Martinenghi, 2011). The degree of social competence - and particularly of assertiveness - in childhood is a predictor of school adjustment, because it helps children and adolescents to adapt to stress and to solve problems. According to English, Delgado, García, Ruiz, & Díaz (2010a), there are three types of interaction, according to the behaviors involved: prosocial, aggressive or avoidant, which are mutually exclusive.

There are a number of studies that used primary and secondary school (this latter term is interchangeable with high school) students to explore the level of social competence that those students have attained, as well as the degree to which it relates to their school performance and various psychological variables. The study conducted by Gutierrez, Escartí, & Pascual (2011), with 822 students aged 8 to 15 years, showed through structural equation models that prosocial behavior, empathy and perception of efficacy positively predict personal and social responsibility of students. These variables are strongly associated with the positive development of young people and their performance within the school environment. The analysis also indicates that aggressiveness is negatively related with responsibility. Costa & Tabernero (2012) note that both self-concept (academic, family and physical) as well as student age directly influence school performance, for which the indicator was obtained through the grades assigned by teachers responsible for different academic subjects with respect to a specific time period. While Redondo, English, & Garcia (2014), in a sample of 2,022 Spanish secondary

school students, found that second grade boys and fourth grade girls had the lowest and highest point prevalence of prosocial behavior, respectively. They were able to verify that prosocial students attributed their academic successes (high grades and high academic averages in Language and Math subjects) to their own efforts to a greater extent than to external variables. This indicates that there is a correlation between prosocial behavior, attribution and academic achievement (school performance). It is noteworthy that only 17% of the students showed a prosocial pattern. Carbonero, Martín, Monsalvo, & Valdivieso (2015) also note that there are strong correlations existing between level of academic performance, level of prosocial behavior and social responsibility attitudes in Spanish students.

Lacunza (2009) studied Argentine children and demonstrated that the presence of social skills prevents the appearance of dysfunctional behaviors, especially those related to aggressiveness and negativism. Further, Oyarzún, Estrada, Pino, & Oyarzún (2012) studied Chilean students and reported a positive association between school achievement and appropriate social behavior in the classroom.

Social development in childhood and adolescence is a predictor of psychological, academic and social adjustment in adulthood. As noted by Mendo, León, Felipe, Polo, & Palacios (2016), the degree of social competence, as well as being related to personal success, has a great influence on the achievement of job skills, even over intellectual abilities and technical skills. Hence, social competence is one of the notable competences of the twenty-first century. Their research, using a sample of young Spaniards, indicates that there was not an optimum level of social skills. The lowest scores were obtained in the skills used to defend their rights, to express their disagreement, to make requests and to initiate positive interactions, i.e., with components of assertiveness. These results coincide with those of Gutiérrez & López (2015), who analyzed the training needs in the field of social skills in Spanish students enrolled in secondary education. Their data indicate that adolescents show low levels of social skills, especially assertive behaviors, self-concept related problems and interpersonal difficulties. They conclude that this population is continuously in risk situations, lacking sufficient skills to avoid conflict situations, which highlights the importance of teaching social-emotional skills to these groups of students, as a subject in the curriculum.

People with undeveloped social competence and assertiveness often have higher incidences of negative thoughts and physiological manifestations related to anxiety. According to Contreras et al. (2005), anxiety is an unpleasant emotional state which is related to negative thoughts and is derived from the evaluation of a situation that is perceived to be

threatening. This encompasses *cognitive*, *physiological* and *motor aspects* that usually imply a low level of adaptive behavior.

Lacunza (2009, p.223) notes that "there is enough empirical evidence that connects social competences to physical and mental health". Deficiencies in social skills are related to a variety of disorders such as anxiety, cardiovascular disease and substance abuse, among others. The author also notes that in a large study conducted in Argentina by various universities and the Ministry of Health, it was found that 12% of children registered some type of social behavior problem, and 16% specifically showed behaviors related to aggressiveness.

There has been a research focus in different countries on the relationship between social skills and social anxiety. Research results indicate that a lower level of social competence presents a higher level of anxiety, both in adolescent populations (Navarro & Yubero, 2012; Torrente, Piqueras, Orgilés, & Espada, 2014) as well as in university students (Caballo, Salazar, Irurtia, Olivares, & Olivares, 2014). Further, Fernández, Carranza, & Ato (2012) corroborate the findings of previous research in demonstrating that the degree of emotional adjustment is a predictor of performance and academic competences, and to the same degree as variables such as IQ. Children who show a style that is characterized by aggressiveness or avoidance may develop problems of psychosocial adjustment and have a greater risk of psycho-affective disorders, because a deficit of social skills and assertiveness makes it difficult to make friends, favors the development of patterns of aggressive behavior as well as, for example, negativism, transgression, impulsivity, self-aggression and behavioral inhibition, which are aspects that can lead to social rejection, isolation, low self-esteem and defenselessness (Lacunza, 2009).

Some studies making comparisons between the sexes have noted that women tend to demonstrate more social skills than men, particularly regarding assertiveness (Garcia et al., 2014; Lacunza, 2009). In adolescents and young people with low social skills, females have higher levels of social anxiety than males, both in terms of their cognitive components and in physiological reactions, while males have greater avoidance or escape behaviors (English et al., 2010b; Zubeidat, Fernández, Sierra, & Salinas, 2008). It has also been reported that men are more likely to attribute their academic success to their own abilities and they show greater personal security, which represents a more adaptive attributional style and greater self-esteem (English et al., 2012).

Other related data with respect to adolescent populations, are provided by Contreras et al. (2005) in their study using a sample of 120 Colombian high school students, whereby they

note that anxiety correlates with academic performance in Math and Science. The study by Lozano and García (2000), with a sample of 684 Spanish high school students, indicates that students of both sexes present high levels of anxiety and aggressiveness. The females show what the authors term as an internal type pathology which is characterized by depressive behavior, somatic complaints and interpersonal relationship problems such as verbal aggression, to a greater extent than males. Meanwhile, males present mainly external syndromes more frequently than women such as attention seeking, disobedience, physical aggressive behavior and threats, which can even lead to criminal behavior. In this sample, correlation is observed between levels of aggressiveness and school performance (school grades). Meanwhile, Cohen et al. (2011) note that the women in their sample scored significantly higher on the Shyness and Social Anxiety scales, a result that has implications because "social incompetence is associated with poor performance, failure, absenteeism, and expulsion from school" (p.169).

It is noteworthy that, although the aforementioned investigations are pertinent in advancing the study of relations maintain between social skills, anxiety and academic performance in adolescents, it is not possible to generalize these results within Mexican populations. In addition, most of these investigations have measured what is termed social anxiety which is defined as an intense and persistent fear of various social situations, whereby a person can be negatively evaluated by others. But, given the implications of anxiety on general psychological functioning, and even as a relevant indicator of a lack of emotional adjustment (Sánchez, Aparicio, & Dresch, 2006), a reduction in evaluation toward solely evaluating social anxiety compromises otherwise relevant information. Anxiety can be triggered by both external and internal stimuli, including thoughts and expectations. High levels of anxiety can lead to physiological manifestations (sleeping difficulties, sweating, fatigue, among others) that can be associated with psychomotor or intellectual errors, difficulty concentrating and alteration of psychological functioning in general in any task that requires attention, concentration and memory (Alccalaico, 2012).

Reynolds & Richmond (1997) developed the Children's Manifest Anxiety Scale (CMAS) which conceptualizes the *anxiety* construct in a broad and complex way and it includes several components: social concerns/concentration, physiological anxiety and restlessness/hypersensitivity. Each of these aspects may be related to the presence or absence of social skills such as assertiveness, as well as to its aggressive/passive counterpart. For these reasons, the use of this scale was considered for the present investigation.

Given the aforementioned background, the next step is to know the relationship between the variables described with respect to the Mexican population, and to emphasize their importance and influence on school performance. The aim of this research was to know the relationship between the levels of assertiveness, academic performance and various components of anxiety in a sample of Mexican high school students, as well as to explore possible differences according to sex. Based on what was reported in the body of literature, a research hypothesis was proposed, stating there would be a correlation between the various variables to be evaluated: lower level of anxiety, higher assertiveness and higher academic performance.

METHOD

Type of study

Descriptive and correlational (Hernández, Fernández, & Baptista, 2014).

Participants

The sample consisted of 535 secondary students (54.6% female, 45.4% male), with a mean age of 13.01 years (*std*=.74, range 11 to 17 years), enrolled in seven groups of first grade (49.7%) and in six groups of second grade, in a public (state) school located in a municipality of Hidalgo, Mexico. Cluster sampling and convenience sampling were undertaken, covering all students in the first two school grades of the campus. This evaluation is part of the first phase of a broader investigation whereby, from the results obtained, a psychological intervention was designed and implemented involving the evaluated students who obtained scores indicating some type of risk.

Instruments

Two scales were used for the measurement of variables. Children's Assertive Behavior Scale (CABS) (Michelson & Wood, 1982). We used the adaptation by Lara and Silva (2002), who standardized the scale for Mexican infant and adolescent populations in an age range from 9 to 17 years, obtaining an internal consistency of .80. It is made up of 27 scenarios with five response options, divided into: factor 1) Give and receive compliments and criticisms, with 20 scenarios designed to evaluate if the child or adolescent behaves assertively, passively or aggressively, in their interaction with diverse people and social situations, and factor 2) Anger and guilt, with seven scenarios that evaluate reactions to situations that are annoying. In the present investigation Cronbach's Alpha values obtained were: .74 for factor 1, .62 for factor 2 and .80 for the Total Assertiveness Scale.

The scale defines each response with a value of 0 to 5 points to characterize the behavior as assertive (scores between 27 and 42), passive (scores between 43 and 50) or aggressive (scores between 51 and 135). The assertive style refers to respecting one's own rights and also the rights of others; the passive style is characterized by acts of defenselessness, subjugation and guilt that impede defending one's own rights and imply the acceptance of what others ask for; the aggressive style corresponds to behaviors and attitudes that intend to attack others without considering them. Scale scores are interpreted in an inverse way (or reverse scored): to lower a higher social ability score (assertiveness) and increase a higher aggressiveness score.

Revised Children's Manifest Anxiety Scale™ (RCMAS™) (Reynolds & Richmond, 1997). This scale is designed to assess the level and nature of anxiety in populations with ages of 6 to 19 years. We used the Bautista (2000) version which obtained validity, reliability and internal consistency of the instrument using the Mexican population, which had a Cronbach's alpha value of .74 while the Cronbach's alpha obtained in the present investigation is .73.

The scale consists of 37 scenarios grouped into four subscales: Physiological anxiety, with 10 scenarios (the Kuder-Richardson (K-R) reliability obtained in this research = .63); concern/hypersensitivity, with 11 scenarios (K-R reliability in this research = .69); social concerns/concentration, with 10 scenarios (reliability K-R in this research = .40), and deceit, with seven scenarios (reliability K-R in this research = .27). Each scenario has a yes or no response, with an assigned value of 0 or 1. Scores can range from 0 to 28 points, whereby the higher the score, the higher the anxiety level. Values below 13 points are considered within the normal standards of anxiety symptoms that adolescents may experience, while values in the range of 13 to 28 points indicate a high level of anxiety, which can be considered clinical. The deceit sub-scale is not considered in the total score for anxiety as it is only indicative that the participant may be deceptive in their answers; with high deceit values, the total test would be invalid for that participant.

In order to attain the level of academic achievement, the average of the grades obtained by the students in the subjects of Spanish language, Math and Natural Sciences at the end of the school year was considered.

Procedure

The instruments were applied to 15 psychology undergraduate students, who had previously received training from the researchers. Each school group presented four applicators with respect to student collaboration, providing instructions to the students and distributing the questionnaires. The

students responded individually to the instruments. When each studied had concluded, he would raise his hand and remain seated and one of the applicators would collect the forms. The teacher of each group was present during the 50 minutes assigned to the session of instrument application, but did not participate in the session. At the end, appreciation was shown to the participating students.

Analysis of data

The instruments were rated by one of the researchers. All data were captured on the basis of analysis using the Statistical Package for the Social Sciences (SPSS 20). Thus individual scores, averages for each instrument and school averages were obtained. These data were grouped according to the sex of the participants for performing the comparison of means using the Student's t-Test. Pearson's correlation coefficient was also obtained in order to understand the relationship between all variables evaluated: (a) assertiveness/ aggressiveness, (b) anxiety and (c) academic performance (school average). It is noteworthy that the sample size of the present investigation (>30) can be considered large. According to the Central Limit Theorem (CLT), in large samples the data tend to be normal and are considered representative of the population (Field, 2009). This justifies the use of the statistical tests used in this research.

Ethical considerations

The research was authorized by the corresponding school institutions. The school principal and the school Technical Council approved the implementation of the instruments one month before the end of the school year. It was made clear to the students that their participation was voluntary and confidential, and that they could stop responding whenever they wished, with no sanction. None of the students refused to answer the questionnaires. The authorities and teachers received a report of the results while maintaining the anonymity of the students and that report was used as the basis for developing an intervention program.

RESULTS

In this section the results of the comparison of the means obtained in each instrument at was applied are presented: Assertiveness Scale and Anxiety Scale, as well as Academic Performance (school average), followed by the correlations obtained between the values of the instruments and the school average.

Means were obtained for the scores of the male and the female participants, in relation to the school average, in the

total of each instrument applied and in each sub-scale. Such measures are presented in a comparative manner in Table 1.

As indicated by the Assertiveness Scale, scores between 51 and 135 points indicate patterns characterized by deficits in social skills and the presence of aggressive behavior. The mean scores obtained by males (M=55.19, std=12.73) were higher than those obtained by females (M=52.73, std= 12.95), and the analysis indicated statistically significant differences (t= -2.19, p <.05). Comparison by sub-scales showed significant differences in factor 1 Giving and receiving compliments and criticisms (t=-2.49, p<.05), which indicates that men show less assertiveness in this aspect, and tend to behave in a way that is more aggressive than women when receiving criticism, expressing their feelings, starting a conversation or making a request. No gender differences were found in relation to factor 2 Anger and guilt, because both males and females reacted predominantly aggressively to situations that bother them.

On the other hand, men and women obtained average scores that fall within normal anxiety standards (M=10.93, std=4.88, M=12.50, std=5.16, respectively), however, the average obtained by those located at the upper limit is close to the clinical anxiety level (13 points, according to the scale). The differences with respect to sex were statistically significant (t= 3.59, p <.01). The comparison also indicated significant differences in two sub-scales: in relation to *Physiological anxiety*, women report higher manifestations of anxiety including sleeping difficulties, nausea, sweating and fatigue; in relation to Restlessness/ hypersensitivity, obsessive preoccupations (for example, being constantly thinking about the judgments others make of their behavior), as well as fear of being emotionally hurt or isolated, something bad happens to them; while in Social concerns/concentration, no significant differences were found between males and females. In both cases, the levels obtained can be considered normal.

Regarding the variable *Academic performance*, the average values can be placed at an adequate level, with the women obtaining a higher school average (M= 8.54, std= .86), compared to males (M= 8.03, std=. 85), differences that were statistically significant (t= 6.79, p <.01).

In Table 2 it can be observed that the total for the Assertiveness Scale, as well as its two factors (*Give and receive compliments and criticism*, and *Anger and guilt*), positively correlates with the total of the Anxiety Scale and with two of its subscales (*Physiological anxiety* and *Social concerns/concentration*). It is noteworthy that on the first scale low scores indicate that the person behaves assertively, while high scores indicate a pattern of aggressive behavior. Positive correlations imply that young people

Table 1. Comparison of means obtained in each instrument applied: Assertiveness Scale and Anxiety Scale, and in Academic Performance (school average).

Variables	Ma	Females			
variables	M	std	M	std	t
TOTAL IN THE ASSERTIVENESS SCALE	55.19	12.73	52.73	12.95	-2.19*
Giving/receiving compliments/criticisms	36.84	8.89	34.96	8.56	-2.49*
Anger and guilt	18.13	5.43	17.77	5.38	-1.20
ACADEMIC PERFORMANCE (Grae point average, GPA)	8.03	.85	8.54	.86	6.79**
TOTAL ON THE ANXIETY SCALE	10.93	4.88	12.50	5.16	3.59**
Physiological anxiety	3.31	2.05	4.00	2.29	3.60**
Restlessness/hypersensitivity	5.32	2.56	6.4	2.41	3.31**
Social concerns/concentration	2.28	1.39	2.45	1.65	1.27

^{*} *p* < .05, ***p* < .01

who behave aggressively have higher levels of anxiety, in the two mentioned indicators.

It is also observed that Academic Performance (School Average) correlates negatively with the total of the Assertiveness Scale and with its two factors, although the degree of association is low. Again, considering the interpretation of the scores of this scale, the negative correlations observed imply that young people who behave aggressively have lower academic performance. Regarding the negative correlation observed with one of the subscales of Anxiety, it is interpreted that where there is a lower degree of social concerns or a lower degree of problems with concentration, the students demonstrate higher academic performance.

It is noteworthy that even though the correlation analysis indicates that several variables are statistically significant, this may be attributable to the size of the sample. Further, some of these correlations were of low magnitude and inferior to .40.

DISCUSSION

According to the study results, the research objectives were fully covered, even though the research hypothesis was only partially fulfilled, since correlations were found between some variables, but correlations were not found among all the variables that were evaluated.

Table 2. Correlations between the values of the Assertiveness Scale, the Anxiety Scale, and Academic Performance (school average).

	Variables	1	2	3	4	5	6	7	8
1	TOTAL ON THE ASSERTIVENESS SCALE	-	.946**	.852**	203**	.182**	.236**	.013	.240**
2	Factor 1. Give and receive compliments and criticisms			.638**	222**	.157**	.189**	.001	.244**
3	Factor 2.Anger and guilt				124**	.180**	.257**	.030	.177**
4	ACADEMIC PERFORMANCE					038	072	.062	124**
	(Grade point average)								
5	TOTAL ON ANXIETY SCALE						.850**	.852**	.695**
6	Physiological anxiety							.557**	.464**
7	Restlessness/								
	Hypersensitivity								.385**
8	Social Concerns/Concentration								

^{**} Significant correlation at the 0.01 level

^{*} Significant correlation at the 0.05 level

The behaviors of men and women can be located within the type of aggressive interaction, with low levels of assertiveness, which means that we can infer a pattern of social incompetence. These data coincide with data reported for Argentine adolescents (Lacunza, 2009; Cohen et al., 2011), Colombian adolescents (Contreras et al., 2005, Oyarzún et al., 2012) and Spanish adolescents (Gutiérrez & López, 2015; Mendo et al., 2016, Redondo et al., 2014). Also, among the participants of the present investigation, males reported higher levels of aggressiveness than females. This difference could be explained by gender stereotypes, which still persist in large sectors of Mexican society. By cultural tradition, many Mexican men are encouraged to focus on goal-setting and aggressive competitiveness, as well as behaving rudely, which are behaviors considered to be typically masculine. Men can even be punished socially for expressing positive feelings as noted by Ojeda, Melby, Sánchez, & Rodarte (2007). However, although the expression of feelings may favor some interpersonal relationships, in many cases it is considered to be a feminine characteristic.

On the other hand, the fact of not finding differences related to sex, between the level of aggressiveness in situations of anger, is in agreeance with results noted by Alcázar, Jurado and Reyes (2015), who explain that men and women show a tendency that is similar to anger and its expression. However, those authors do clarify that the form of manifesting anger is different among the different sexes. In that, men express anger physically with behaviors such as kicking and hitting a wall, but women resort to throwing objects or slamming a door. However, the results indicate that the adolescents in this study have not developed a pattern of social interaction that allows them to be properly integrated into the school environment.

Regarding anxiety levels, those detected in women were very close to the clinical level, in that those women already require specialized psychological attention. This result is consistent with studies conducted in other countries (English et al., 2010b; Zubeidat et al., 2008) which report that women are more prone to anxiety than men. In this respect, it is noteworthy that anxiety is the way people respond to situations they perceive as threatening. According to Carreño, Morales, Sánchez, Henales, & Espíndola (2007), anxious behaviors are the product of acquired behavioral dispositions, involving residues of past experiences, that predispose the individual to perceive the world as potentially dangerous. People learn to respond with manifestations of anxiety when they have no adaptive strategies.

An explanation that can be proffered for the higher levels of anxiety in women is related to cultural and parenting

aspects that are produced by gender stereotypes and roles. Traditionally, women are attributed traits such as sensitivity, affectivity, modesty, domestic life and flexibility, which are socially considered to be feminine characteristics. Accordingly, many girls are raised in an environment that limits them to leaving home and then belonging to different social groups, which also requires that the girls learn domestic tasks, that they dress modestly, express themselves with respect and propriety (before their peers and adults), and to even serve others; in short, they must be consistent with the conduct and way of life of women. From an early age, many Mexicans are warned of the dangers to which they are exposed in the world, and they are differential treatment, they are overprotected and convinced of their weakness and need for protection.

All of the above factors can generate a series of obsessive fears and concerns in teenagers, including the fact of constantly thinking about the judgments others make of their behavior, having excessive concerns for their safety and integrity, as well as fear of being hurt, being emotionally isolated, feeling alone and worrying that something will happen to them. They can also generate manifestations of physiological anxiety, expressed in symptoms such as tiredness, sweating of the hands, nightmares, sleeping difficulties, irritability, choking sensation and nausea, and difficulty concentrating on school tasks. These are characteristics that were detected in the participants of the present study. Further, it is necessary to consider that in Mexican society there are still many parental practices involving psychological control, with manipulation of the thoughts and emotions of children and adolescents and particularly related to the female sex, involving negative criticism, withdrawal of affection, blackmail, restrictive communication, devaluation, overprotection and intrusive practices (González & Morales, 2016). This raises the possibility that learned anxiety, that is, the series of thoughts that many women adopt as their own and then internalize, tend to become thought habits that are developed like any behavioral habit (Cartagena, 2008) and which can persist throughout their lives.

The aforementioned scenario necessarily leads to a lack of social skills and assertiveness as well as emotional problems in many Mexican male and female adolescents, as realized in the present study. However, it noteworthy that the academic average obtained does not appear to be a problem as it is higher than 8 in both cases.

Taking into account the data of the entire sample under study, the findings indicate a relationship between levels of assertiveness and anxiety. Since low levels of assertiveness imply a high degree of aggressiveness in behaviors characterized by fights, accusations, threats and, generally, attitudes that mean attacking others without considering them, it is possible to assume that these aspects were associated with a higher level of anxiety symptoms. These results are consistent with the findings of a number of studies (Caballo et al. 2014; Cohen et al. 2011; Inglés et al. 2010a; Navarro & Yubero, 2012; Torrente et al. 2014) which coincide with the fact that the greater the deficit in social skills or assertiveness, manifesting as aggressive behaviors, the greater the number of anxiety symptoms. This is a relationship that is consistently presented in different stages of development.

It is noteworthy that none of the factors in the Assertiveness Scale correlated with the Anxiety/Hypersensitivity sub-scale of the Anxiety scale, which can be associated with obsessive preoccupation with indefinite ideas. This finding suggests that the deficit in social skills is associated with anxiety although not necessarily with all its areas of manifestation. Further, it is also noteworthy that some adolescents may have developed social skills which may become inhibited in the presence of high levels of anxiety.

The findings of the present study also indicate a relationship between social ability, anxiety, and academic achievement. It is confirmed that students with low performance in assertiveness, with high levels of aggressiveness and high levels of anxiety are also those students that demonstrate a lower level of academic performance. In this regard, we can add the findings of Contreras et al. (2005) who note that mild or moderate anxiety can fulfill a useful or favorable role for the individual, because that level of anxiety can generate a state of alertness and tension which would improve academic performance. However, high levels of anxiety can lead to errors when performing intellectual tasks, because the memory processes, concentration and psychological functioning of the student are affected adversely.

Although the academic average in this study cannot be considered low, the findings are generally cause for concern, because adolescents are at risk of developing problems of psychosocial adjustment, psycho-affective disorders, social rejection, isolation and low self-esteem, given their poor levels of social skills and assertiveness (Castro et al., 2010, Gutiérrez, & López, 2015) and particularly in the case of women anxiety-related risks exist.

Therefore, in light of the above, there is a need to develop prevention and intervention programs based on explicit teaching of social skills, especially assertiveness, in primary and secondary classrooms. This is of great importance, since the capacity of children and adolescents to interact with others assertively contributes to all aspects of their development (Bermúdez, 2010) and has a strong impact on the psychological organization of the individual with respect to their quality of life and also their social inclusion (Cohen et al., 2011).

Previous research has tested the effectiveness of social skills intervention programs in reducing anxiety levels (Monjas, 2012; Olivares, Olivares, & Macià, 2014; Wagner, Pereira, & Oliveira, 2014). The programs emphasize the importance of adolescents learning to relate to peers and teachers in the classroom and in other school and social settings. This demonstrates the importance of integrating the educational curriculum, as an essential part of schooling, with programs aimed at the development of social skills, which explicitly teach skills on relating assertively. Increasing social competence within the classroom would help improve the integration of adolescents with their peers, reduce aggressiveness and also develop more adaptive behaviors (Castro, 2005).

Social failure in school, manifested through rejection or aggressiveness, is a risk factor related to the integral development of the child and adolescent. Therefore, it is a factor that can lead to low school performance which could ultimately lead to school failure. As Contreras et al. (2005) note, school failure "is a serious human, moral and social problem, which often generates exclusions that will mark young people throughout their lives" (p.187).

Within the limitations of this study we can point out the low reliability of the Social concerns/Concentration (.40) and Deceit (.27) subscales, which are part of the Anxiety Scale. Although the Total Anxiety score has an acceptable reliability, this decreased slightly when incorporating the data of the first-mentioned subscale. Regarding the Deceit subscale, even if it is not considered for the Total Anxiety score, the fact of obtaining low reliability limits the degree of data consistency. This suggests the pertinence of future instrument studies to find other instrument options, or to incorporate new scenarios into the subscales, which would allow for a greater degree of consistency in the findings.

In conclusion, it is important to note the need to incorporate into the analysis the inclusion of other constructs. It is convenient to evaluate other psychological indicators in students, related to well-being and psychological imbalance, for example, the level of self-esteem, self-efficacy and motivation relating to both social skills and academic performance. Research such as that by Becerra and Reidl (2015), with Mexican high school (secondary) students, indicates that academic performance correlates with achievement motivation, attributional style and self-efficacy. Interventions that are aimed at the development of social competence, as well as the promotion of protective factors that contribute to improving academic achievement and social adjustment in adolescents, must cover various aspects of the problem, adapt to the school context and also aim at promoting an integral development of students in the school context.

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